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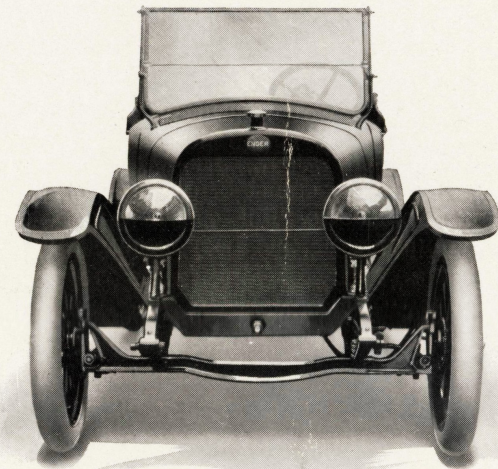
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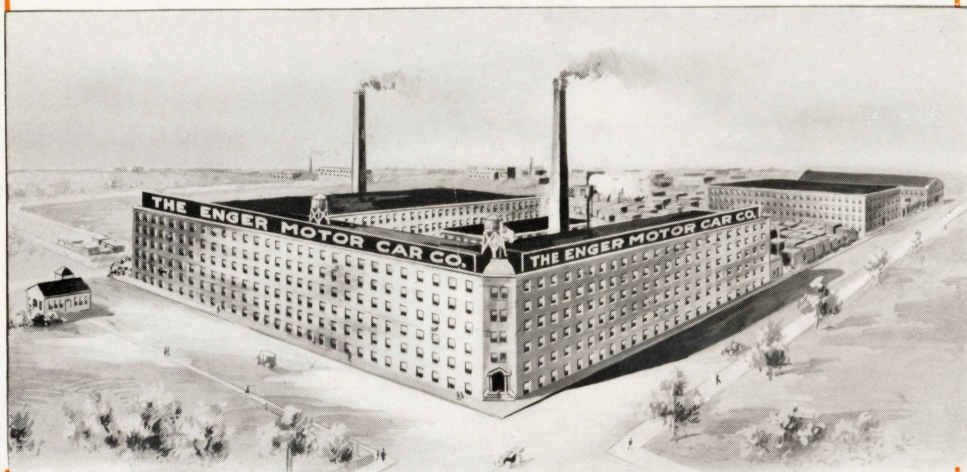
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TWIN-UNIT TWELVE



The
ENGER MOTOR CAR COMPANY
CINCINNATI, OHIO



THE HOME OF THE ENGER

Nineteen-Seventeen Enger Twin-Unit Twelve Valve-in-Head Motor Car



NINETEEN-SEVENTEEN Enger Twin-Unit Twelve Valve-in-Head Motor Cars have been endorsed and purchased by the knowing motorists. When power and economy are desired, the Enger Twin-Unit Twelve is supreme.

To the many advantages of the twelve-cylinder motor in the Enger, we have added economy.

With tens of thousands of multiple-cylinder motors in successful operation today, the superiority of the twelve-cylinder design is an accepted fact by the knowing motorists.

With two sets of six cylinders operating on a single crank shaft, giving double the number of impulses, without the addition of a single rotating motor part, the Enger Twin-Unit Twelve has a remarkable range of activity with an almost complete absence of vibration at all speeds.

The twelve-cylinder motor, with uniformity of torque, is noted for its smoothness of action and is comparable to the action of steam. There are six impulses per crank shaft revolution, compared with three in the single six—a difference of 100% in favor of the twelve-cylinder motor.

The smooth, velvety action of the Enger Twin-Unit Twelve, with its rapid acceleration and hill-climbing ability without change of gears, is sufficient to warrant its national demand, but to these advantages is added the wonderful economy device—an exclusive Enger feature. The motorist who purchases a car before riding in the 1917 Enger Twin-Unit Twelve is doing an injustice to himself.

The Enger Twin-Unit Twelve has a valve-in-head motor. Valve-in-head motors are noted for power, reliability, accessibility, economy and endurance. These features you find in the 1917 Enger Twin-Unit Twelve, combined with velvety, smooth, quiet, quick acceleration, great range for hill climbing on high, and economy, far better than the single six.

THE motor car owner, regardless of his income, is interested in the cost of operating his car. He is not inclined to buy gasoline for an inefficient motor unless he can, in return, secure luxurious features that are otherwise unobtainable.

Luxurious features mean power for quick acceleration, power for hill climbing on high, flexible control on high, comfortable riding space and sufficient weight to secure good riding qualities at all speeds.

Economy means a small motor with small cubic displacement. Naturally, a small motor will not use the same amount of gasoline as the large motor with these luxurious features. If the car is built light to assist the small motor, comfort in space and riding qualities are sacrificed.

The combining of economy and luxurious features, which means economy, with power for quick acceleration, hill climbing on high in a car of sufficient weight to insure space for comfort and riding qualities at all speeds, has been the goal of all car manufacturers.

This very combination has been secured, and has resulted in a truly remarkable performing car, as will be explained later, but first let us see what becomes of the gasoline you buy, a most interesting subject.



To make figures simple, let us assume that you buy \$1.00 worth of gasoline, which is put in your tank. By actual test on a number of standard motors it is found that the gasoline is consumed as shown in the diagram herewith.

When you spend \$1.00 for gasoline, you get 21 cents return in power. 73 cents of every \$1.00 is used in heating and cooling water and exhausting hot gases out of the muffler.

The Principle—If we reduced the engine in size by half, we would naturally save half of the 35 cents lost in heating and cool-

ing water, as we would exhaust half the amount of gas with the small motor. We would save half of the 38 cents exhaust loss, a total saving in heating water and exhausting gas of 36%, or more than received in power on the larger engine.

But with the small motor you would not have the power for quick acceleration, hill climbing on high and the high speed. The little motor, however, would give plenty of power for running the car at the conditions used 90% of the time; namely, from 5 to 40 miles per hour on level road with slight up-grade.

The Answer—In the 1917 Enger, we find a twin-unit twelve, a standard twelve-cylinder valve-in-head motor, with aluminum pistons; a motor with large power that will accelerate the car rapidly, climb hills on high, and have a large reserve of power for speed.

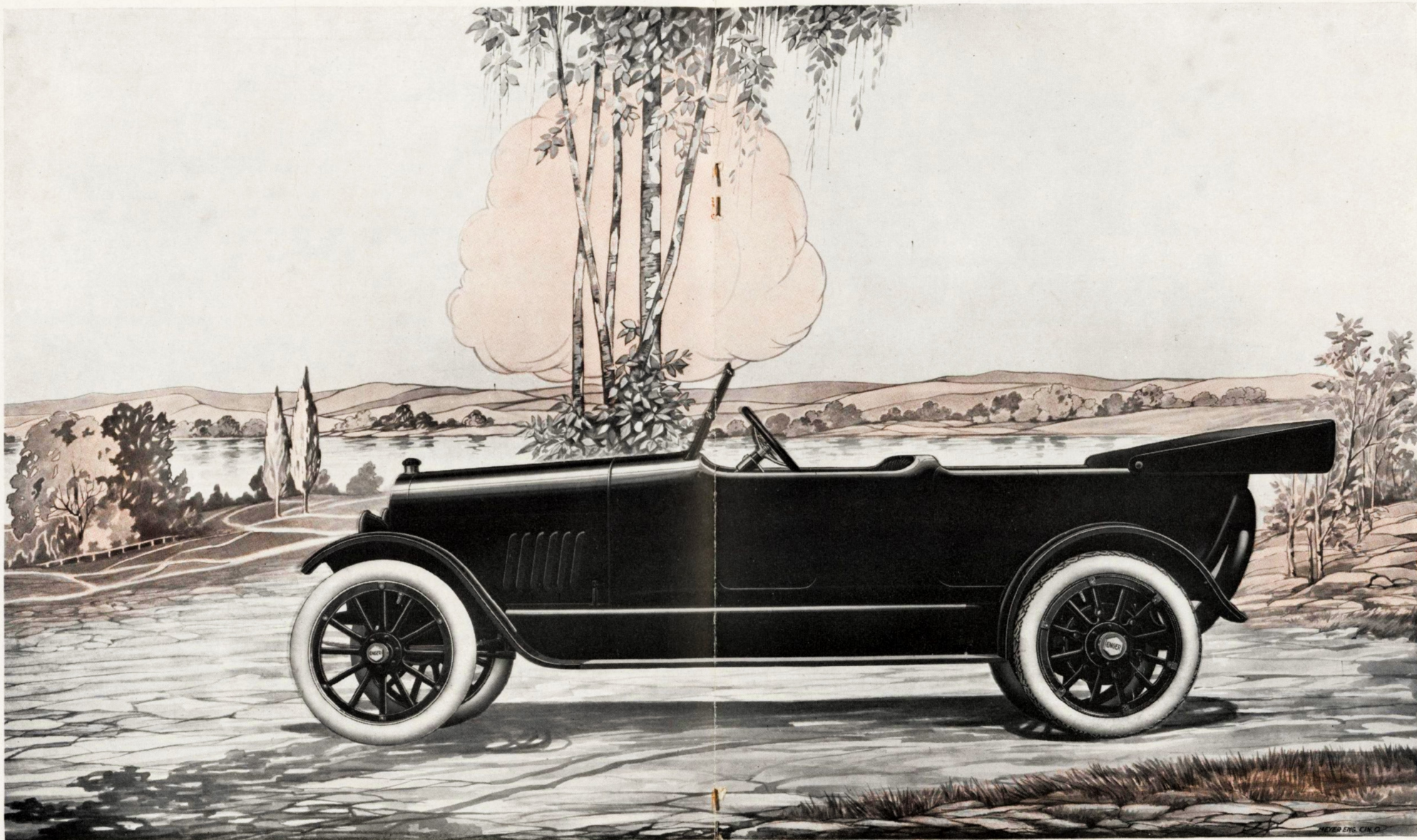
A slight shift of the economy lever and we have a six-cylinder motor of small cubic displacement, but plenty of power for ordinary driving.

The Enger Twin-Unit Twelve truly combines power and economy. With the twelve cylinders you have power and luxurious advantages. With the six cylinders you have most remarkable economy and with the small weight of the aluminum pistons, 5½ oz., the absence of vibration is remarkable.

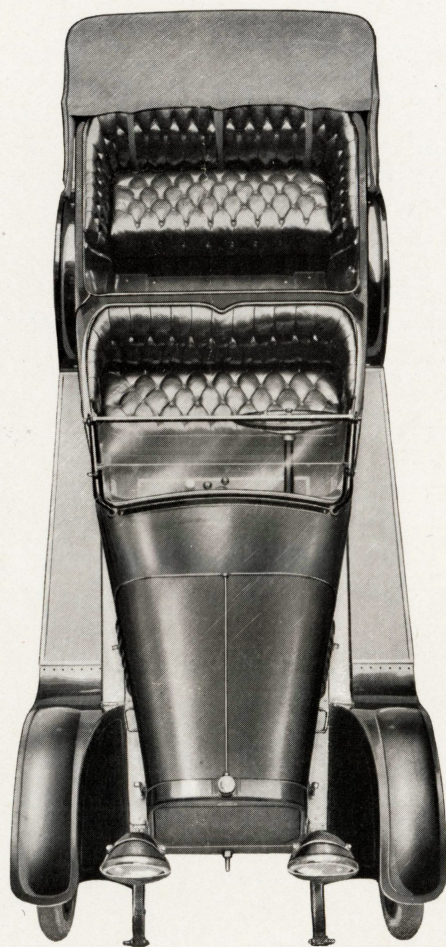
The European manufacturer, a few years past, equipped his car with a motor of large cubic displacement, and thereby secured the advantages of great power, but the disadvantage of high fuel consumption. The increased cost of gasoline forced the manufacturer to equip his car with a motor of small cubic displacement, and naturally small power, and with the average European car it is necessary to shift gears for ordinary hills, and the acceleration is slow.

The Enger Twin-Unit Twelve for the first time combined power and economy. It is the only car to buy if you want power and economy.

By actual test, the 1917 Enger will accelerate from stationary to 25 miles per hour in five seconds. You have a flexible range of from 1 to 60 miles per hour on high, and for ordinary running, by use of the convenient economy lever, you can secure 25 to 35 miles with a gallon of gasoline.



ENGER TWIN-UNIT TWELVE, \$1295



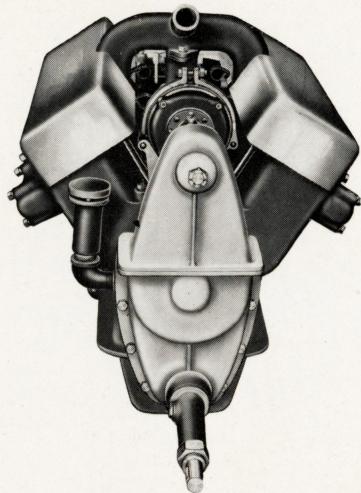
This car meets every demand of the motorist—beautiful to look at, generous in capacity, easy riding, simple in operation—and insures satisfaction and pride born of merit. PRICE, \$1,295.00.

The lines of the 1917 Enger Twin-Unit Twelve are so pleasing that they can not help but satisfy the most exacting purchaser. Long, low hung, with cowl on front seat, following the best American and foreign style. It is a big car, yet not bulky. Roomy and comfortable, beautiful to look at, elegantly finished, and finely upholstered with high-grade leather.

The Enger Twin-Unit Twelve is designed for the man or woman who wants a car of refinements in detail—a car of quiet and distinctive beauty. The body has the full yacht streamline, with the front seat cowl, which blends perfectly into the lines of the body. Angles are unknown. Generous curves have been liberally used, which add to the expense, yet at the same time, wonderfully to the appearance. For real artistic beauty and design, the Enger Twin-Unit Twelve is unexcelled by any car of any class or price.

Equipped with the Enger Twin-Unit Twelve Valve-in-Head Motor, this car leaves nothing to be desired in velvety, smooth performance, rapid acceleration, power for the hills on high, and the flexible range of 1 to 60 miles per hour without shifting gear.

Built to satisfy the demand for the best.



**TWIN-UNIT TWELVE VALVE-IN-HEAD
MOTOR**

Thirty-five miles on one gallon of gasoline with a car equipped with a twin-unit twelve motor, which will give you wonderful acceleration, hill-climbing qualities and speed, is a "WORLD'S RECORD." By actual test, the 1917 Enger on the Indianapolis Speedway, with passengers weighing 3,350 lbs., with the use of the economy feature, ran more than thirty-five miles with a standard adjustment of the carburetor, on one gallon of Red Crown gasoline. In power, this represents moving 63 tons one mile on a gallon of gasoline, which weighs $6\frac{1}{2}$ lbs. Taking into consideration the accelerating qualities of this car, this record has never been equalled by any car, regardless of price.

Why buy a car with only one of these features, when both are important? The Enger alone combines economy and power.

A ride in the 1917 Enger motor car will convince you as to the proof of these statements.

SPECIFICATIONS

BODY—Five-passenger, touring type, streamline body and hood, with deep cowl, piano-finished instrument board, extra wide seats and doors. Cowl on front seat.

FRAME—Reinforced pressed steel, extra heavy with deep side members.

SPRINGS—Alloy steel, double heat-treated; front, semi-elliptic; rear, Enger special full-floating cantilever, extra long.

FRONT AXLE—Drop-forged, I-beam section with integral yokes, drop-forged tie-rod ends and steering spindles, all double heat-treated. Front wheels have large cup and cone ball bearings.

REAR AXLE—Full-floating type with double row bearings throughout. In the full-floating type of axle, the weight of the car is carried on the housing, the live axle shaft simply transmitting rotation to the rear wheels. The driving pinion and ring gear with which it engages are the spiral type, specially cut, insuring unusually smooth action and reducing friction.

WHEELS—Wood artillery type, with demountable rims, extra large hub flanges and twelve heavy spokes.

TIRES—32" x 4" nonskid rear; plain in front.

WHEELBASE—116".

TREAD—56".

MOTOR—Three-point suspension unit power plant; twelve cylinders, four cycle. Valve-in-head type. Cylinders, semi-steel; crank shaft, main bearing bushings with exceptionally large bearing surfaces. Noiseless ball and adjustable push rods working in ball-socketed rocker arms with felt oil retainers. Motor is equipped with economy device allowing operation of six or twelve cylinders as desired. Aluminum pistons.

MAXIMUM SPEED OF MOTOR—3000 r. p. m.

HORSEPOWER—55.

IGNITION—Jump spark; current supplied by improved Remy System.

CARBURETOR—Stromberg, automatic float feed, latest type.

LUBRICATION—Force feed, oil circulated by gear pump; oil forced under pressure through hollow crank shaft to all connecting-rod bearings. Pump located at the bottom of the oil pan. Oil pressure gauge on instrument board.

CLUTCH—Multiple discs, dry plate clutch, insuring quiet and easy gear shifting.

TRANSMISSION—Sliding gear, selective type three speeds forward and reverse. Heat-treated nickel steel transmission gears. Clutch gear and sliding gear shaft running on double row annular ball bearings; counter gears, bronze bearings.

DRIVE—Direct to spiral bevel gears in rear axle; nickel steel heat-treated propeller shaft and two universal joints; relieving the power plant of all torsional strain.

BRAKES—Emergency, internal expanding; service, external contracting; very effective and positive, but entirely eliminating dragging and grabbing; anti-rattling; adjustable for wear.

STEERING GEAR—Left-hand drive, improved type, with one-piece housing; semi-irreversible; split nut and worm type, fully adjustable; ball thrust bearing; eighteen-inch steering wheel with inserted spider; horn button located in the center of the steering wheel.

CONTROL—Friction-retained spark and throttle levers on top of steering wheel. Independent foot accelerator and muffler cut-out pedals for each six cylinders of motor. Foot push button for starter, pedal for service brake and clutch; levers for gear changes and emergency brake conveniently located in center of body. Center control.

FINISH—Handsomely painted, body and wheels dark green; hood, skirts, fenders and chassis black; deep cushions, luxuriously upholstered in genuine black leather and curled hair over deep coil springs. Running boards and floor boards oil-treated, linoleum covered, aluminum bound.

STARTER—The Westinghouse double-unit system of electric cranking, lighting and ignition as an integral part of the motor, complete with combination ammeter and switch on instrument board.

STANDARD EQUIPMENT—New style, double bulb electric headlights, controlled by switch on instrument board. Current supplied by separate unit self-generating Westinghouse system, in connection with a large storage battery. Electric tail lamp. Electric light on instrument board. Crown fenders. All lamps black, nickel trimmed. Motor driven electric horn; high-grade speedometer; robe rail and foot rest. One extra demountable rim. Rear license hanger. Substantial tire carrier in rear. Complete set of tools, including jack, pump and tire repair kit; high-grade mohair one-man top with Jiffy curtains. New style rain vision ventilating windshield.

PRICE—\$1,295.00 f. o. b. Cincinnati, Ohio

Warranty

We Warrant each new motor vehicle manufactured by us to be free from defects in material and workmanship under normal use and service, our obligation under this warranty being limited to making good at our factory any part or parts thereof which shall, within ninety (90) days after delivery of such vehicle to the original purchaser, be returned to us with transportation charges prepaid, and which our examination shall disclose to our satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied and of all other obligations or liabilities on our part, and we neither assume nor authorize any other person to assume for us any other liability in connection with the sale of our vehicles.

This warranty shall not apply to any vehicle which shall have been repaired or altered outside of our factory in any way so as, in our judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident.

We make no warranty whatever in respect to tires, rims, ignition apparatus, horns or other signaling devices, starting devices, generators, batteries, speedometers or other trade accessories, inasmuch as they are usually warranted separately by their respective manufacturers.

THE ENGER MOTOR CAR COMPANY,
CINCINNATI, OHIO.

